

EGU2020-3491

<https://doi.org/10.5194/egusphere-egu2020-3491>

EGU General Assembly 2020

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Digitization of historical wind speed observations at the Swedish Meteorological and Hydrological Institute

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This contribution presents the first work package (WP1) of the project “Assessing centennial wind speed variability from a historical weather data rescue project in Sweden”, funded by FORMAS – A Swedish Research Council for Sustainable Development (ref. 2019-00509); previously reported in EGU2019-17792-1. Under a warming climate, one of the major uncertainties on the causes driving the climate variability of winds over land (i.e., the “stalling” phenomenon and the recent “recovery” since the 2010s) is mainly due to short availability (i.e. since the 1960s) and low quality of observed wind records as stated by the Fifth Assessment Report (AR5) of the Intergovernmental Panel on Climate Change (IPCC).

In this study we present the first steps of a joint initiative between the Swedish Meteorological and Hydrological Institute (SMHI) and the University of Gothenburg aimed at filling the key gap of short availability and low quality of wind datasets, and improve the limited knowledge on the causes driving wind speed variability in a changing climate across Sweden. The aim of the WP1 is to rescue historical wind speed series available in the old weather archives at SMHI for the 1920s-1930s. 13 stations with daily wind speed data (in meters per second) during the period 1925-1938 have been selected for digitization; i.e., spanning back our records 2 decades more. To get wind observations from paper to screen we will follow the “Guidelines on Best Practices for Climate Data Rescue” of the World Meteorological Organization. Our protocol will consist on (i) designing a template for digitization; (ii) digitizing papers by an imaging process based on scanning and photographs; and (iii) typing numbers of wind speed data into the template. WP2 will ensure the quality and homogeneity of wind speed series rescued.